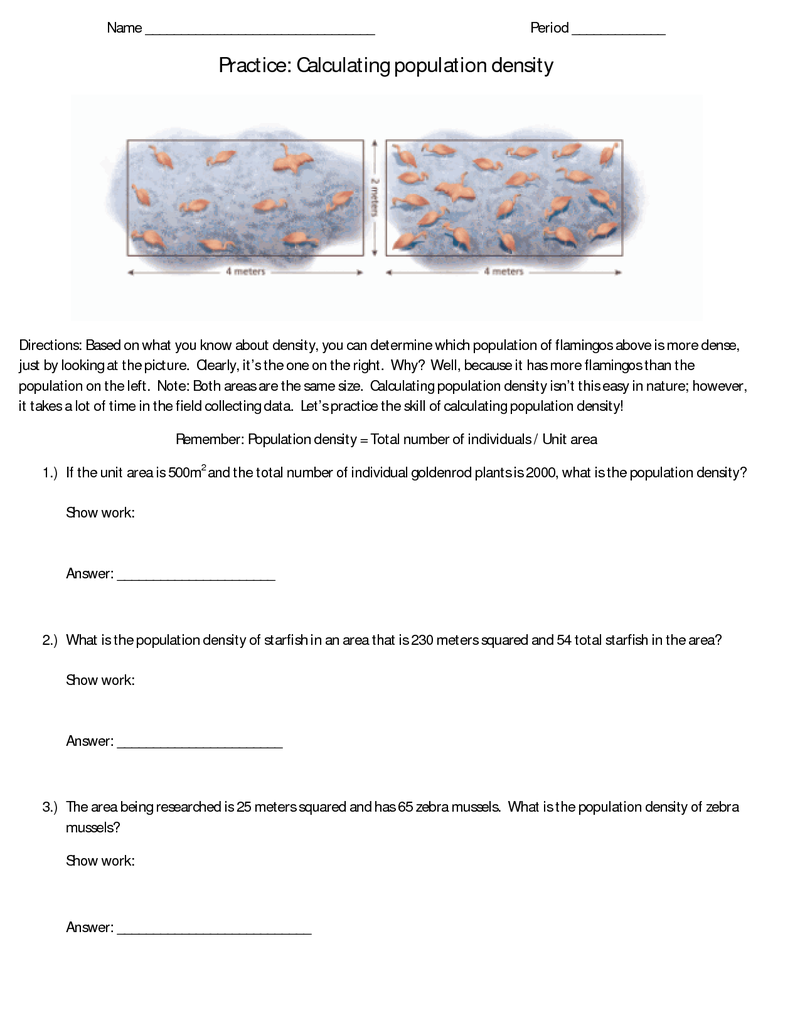
**NAME: DATE:**

**CALCULATING POPULATION DENSITY**

Based on what we have discussed about the density of populations of organisms, we can determine which population of flamingos above has a higher density. Due to the areas that both populations of flamingos occupy is the same, the picture on the right has a higher population density because it simply has more organisms. However, in other cases, areas of different populations will be different.

**Directions: Calculate the population densities for each of the following.**

**Be sure to show all work.**

1. What is the population density of 55 sea urchins in an area that is 250m2.
2. What is the population density of a pack of wolves that occupy an area that is 145m2? There are a total of 20 wolves in the pack.
3. In a given area of 500m2, there are 2,000 goldenrod plants. What is the population density?
4. Next door in Dr. Fogleman’s noisy physics classroom, he has a student population of 25 young physicists. The area of his classroom is three meters larger than the overall area of Mr. Martinelli’s classroom of young biologists. Calculate the population density of the Dr. Fogleman’s class. Already knowing the population density for our classroom, which classroom has a higher population density?
5. What are some potential environmental factors (biotic or abiotic) that could negatively affect a population density for a particular organism? What are some factors that could positively affect a population density for a particular organism?
6. What circumstances would yield equilibrium in population density for a given population?